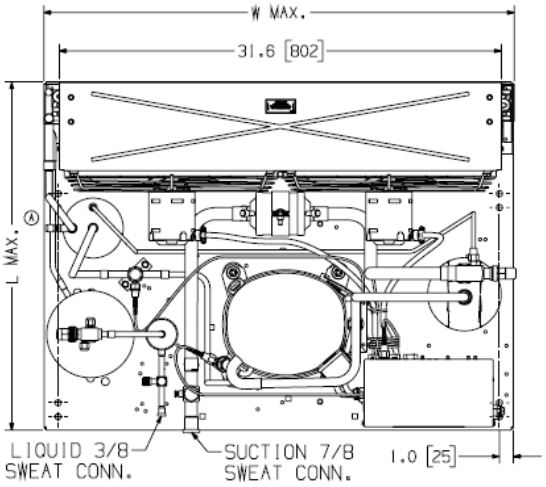
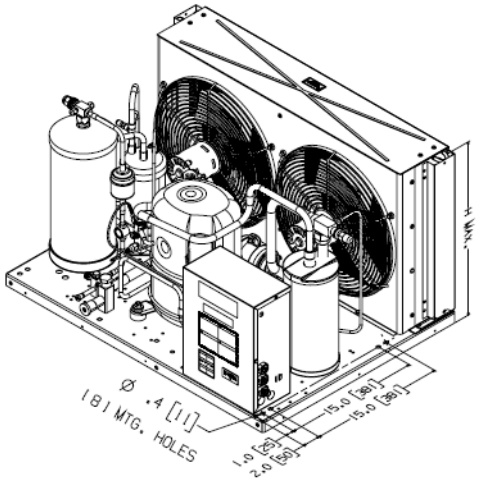
March 16, 2011

Tecumseh Compressor Company
Indoor Condensing Units

Model: AWA9518ZXNXF **BoM: 2C2156-1** **R-404A** **2.25 HP** **AIRCOOLED**





Model	Dimensions, inches				Line Connection*		Pumpdown	Air	Oil Ch	Gr. Wt.
	L	W	H	CH	Suction	Liquid	90 °F 90%	SCFM	Oz.	Lbs.
AWA9518ZXNXF	25.0	33.5	19.5	14.7	7/8” S	3/8” S	18.14 lbs	1525	38.5	220
* F = Flare, S = Solder, RF or RS = Rotolock with Flare or Solder Connections, C = Compression Fitting										

		Ambient Temperatures											
Evaporator T		80°F			90°F			100°F			110°F		
°F	PSIG	BTUH	Watts	Cond T	BTUH	Watts	Cond T	BTUH	Watts	Cond T	BTUH	Watts	Cond T
-10	23.2	10185	2021	90	8659	1970	100	7287	1933	109	5874	1871	119
0	32.8	13115	2269	93	11392	2262	103	9822	2252	112	8221	2223	121
5	37.9	14790	2695	95	12952	2408	104	11255	2410	113	9542	2398	123
10	43.3	16603	2521	96	14642	2553	106	12800	2569	115	10962	2573	124
15	49.1	18556	2648	98	16461	2699	108	14456	2726	116	12480	2747	126
20	55.5	20648	2776	100	18409	2844	109	16224	2883	118	14096	2920	127
30	69.5	25250	3033	104	22694	3135	113	20091	3196	122	17624	3264	130
35	77.2	27760	3163	106	25030	3280	115	22192	3352	124	19536	3435	132
40	85.5	30410	3294	109	27495	3425	117	24403	3507	126	21546	3605	134
45	94.3	33198	3425	111	30090	3570	119	26726	3662	128	23654	3775	136

60 Hz Performance

Return gas temp. 40°F Evaporator Temp. 20°F or less, 5°F sub-cooling
Return gas temp. 65°F for Evaporator Temp. > 20°F, 5°F sub-cooling

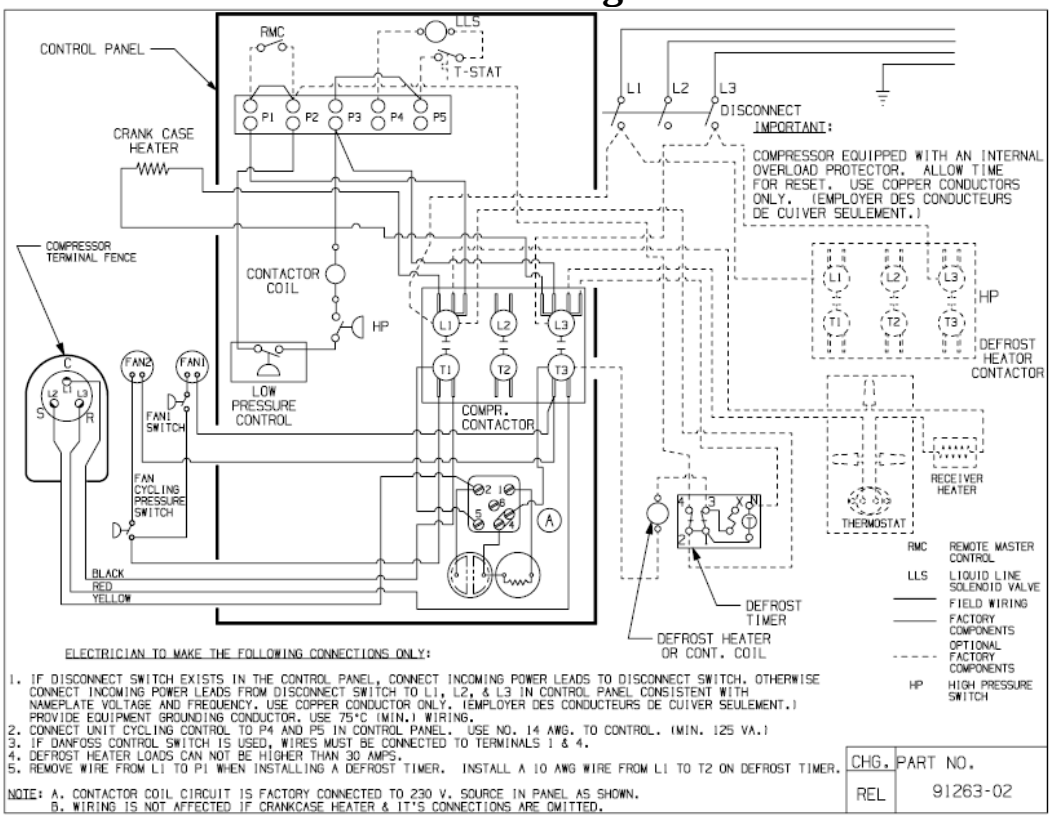
March 16, 2011

Specifications/ Parts:

Model	AWA9518ZXNXF
Unit Bill of Material	2C2156-1
Nominal Volts-Hz-Ph	208-230-60-1
Refrigeration Range	-10° to 45°F
Design Pressure Low	181
Design Pressure High	450
Voltage Range	187 to 254
Min. Circuit Ampacity	20.0
Max. Fuse Size (amps)	30
Compressor Model	AWA9514ZXN
Comp. Bill of Material	AW617ET-099-P2
Compressor RLA/LRA	14.7 / 90.0
Overload	INTERNAL
Relay	820ARR3J50
Run Capacitor	85PR370F21
Run Capacitor Rating	45MFD 370V(M)VDE
Start Capacitor	85PS330D17
Start Capacitor Rating	145-175 MFD 330V VDE
Contactor	91014
Unit Drawing	DGU1918-58
Wiring Diagram	91263-02

Fan Motor	810F050C20 (2)
Fan Motor RLA	0.7 Each
Fan Blade	51568-1 (2)
Fan Guard	70831 (2)
Fan Shroud	70648-2
High Pressure Switch	84095-2
Low Pressure Control	84026-2
Oil Separator *	704-00002
Condenser	50858-1
Fan Switch	84096-1
Fan Switch	84096-2
Receiver Tank	51082-1
Liquid Valve	31592
Liquid Filter *	70081
Sight Glass *	70084
Suction Valve *	31529-1
Rotolock Valve Gasket	30233
Discharge Valve	56596
Suction Filter *	70082
Accumulator *	TK00042000
Crankcase Heater	91022-1
Defrost Timer *	N/A
Suction Shut Off Valve*	56500-K14
Liquid Shut Off Valve*	56500-K06
Shrader Valve Body*	56510
Valve Core*	56552
* = Equipped Units Only	

Electrical Diagram


CONTROL PANEL
RMC
LLS
T-STAT
P1 P2 P3 P4 P5
CRANK CASE HEATER
L1 L2 L3
DISCONNECT
IMPORTANT:
COMPRESSOR EQUIPPED WITH AN INTERNAL OVERLOAD PROTECTOR. ALLOW TIME FOR RESET. USE COPPER CONDUCTORS ONLY. (EMPLOYER DES CONDUCTEURS DE CUIVER SEULEMENT.)
COMPRESSOR TERMINAL FENCE
CONTACTOR COIL
HP
LOW PRESSURE CONTROL
COMPR. CONTACTOR
T1 T2 T3
DEFROST HEATOR CONTACTOR
FAN2
FAN1
FAN1 SWITCH
FAN CYCLING PRESSURE SWITCH
RECEIVER HEATER
THERMOSTAT
DEFROST TIMER
DEFROST HEATER OR CONT. COIL
BLACK
RED
YELLOW
RMC REMOTE MASTER CONTROL
LLS LIQUID LINE SOLENOID VALVE
FIELD WIRING
FACTORY COMPONENTS
OPTIONAL FACTORY COMPONENTS
HP HIGH PRESSURE SWITCH
ELECTRICIAN TO MAKE THE FOLLOWING CONNECTIONS ONLY:
1. IF DISCONNECT SWITCH EXISTS IN THE CONTROL PANEL, CONNECT INCOMING POWER LEADS TO DISCONNECT SWITCH. OTHERWISE CONNECT INCOMING POWER LEADS FROM DISCONNECT SWITCH TO L1, L2, & L3 IN CONTROL PANEL CONSISTENT WITH NAMEPLATE VOLTAGE AND FREQUENCY. USE COPPER CONDUCTOR ONLY. (EMPLOYER DES CONDUCTEURS DE CUIVER SEULEMENT.) PROVIDE EQUIPMENT GROUNDING CONDUCTOR. USE 75°C (MIN.) WIRING.
2. CONNECT UNIT CYCLING CONTROL TO P4 AND P5 IN CONTROL PANEL. USE NO. 14 AWG. TO CONTROL. (MIN. 125 VA.)
3. IF DANFOSS CONTROL SWITCH IS USED, WIRES MUST BE CONNECTED TO TERMINALS 1 & 4.
4. DEFROST HEATER LOADS CAN NOT BE HIGHER THAN 30 AMPS.
5. REMOVE WIRE FROM L1 TO P1 WHEN INSTALLING A DEFROST TIMER. INSTALL A 10 AWG WIRE FROM L1 TO T2 ON DEFROST TIMER.
NOTE: A. CONTACTOR COIL CIRCUIT IS FACTORY CONNECTED TO 230 V. SOURCE IN PANEL AS SHOWN.
B. WIRING IS NOT AFFECTED IF CRANKCASE HEATER & IT'S CONNECTIONS ARE OMITTED.
CHG.
REL
PART NO.
91263-02